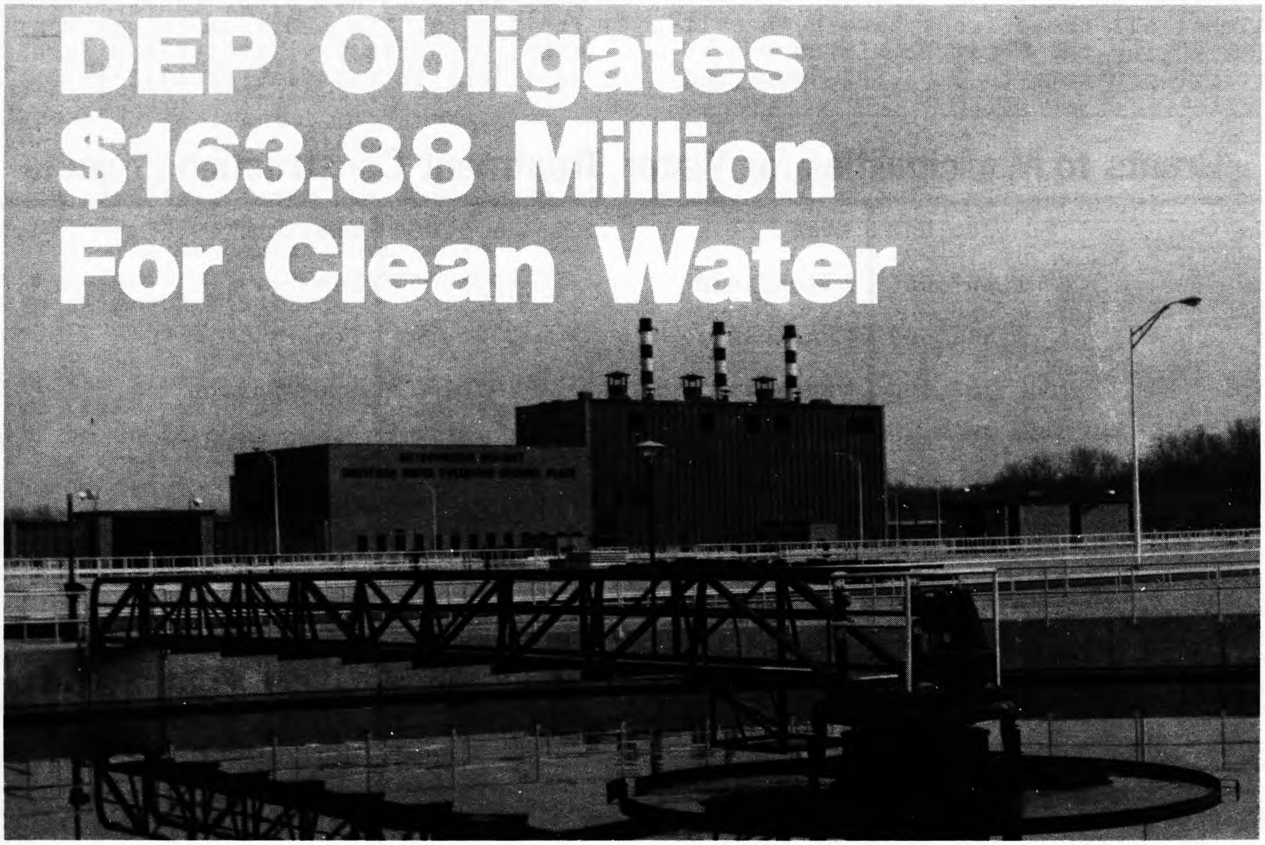
Connecticut Department of Environmental Protection

citizens' bulletin

Volume 5 Number 3 November 1977 $2/yr

DEP Obligates $163.88 Million For Clean Water



On October 6 Governor Ella Grasso announced that the State of Connecticut has succeeded in obligating $163.88 million in federal funds for municipal water treatment construction projects.

The Governor commended Commissioner Stanley J. Pac and the Water Compliance Unit of the Department of Environmental Protection for its intensive effort to meet the deadline of September 30, 1977 for commitment of all dollars that were available as of September 30, 1976.

The effort was launched at Governor Grasso's direction in February when the department reported that $137 million of the original $153 million had not yet been obligated. To assure that all available funds would be used to meet pressing clean water needs throughout the state, the Governor

(Cont. on Next Page.)

In this issue

DEP Obligates $163.88M....................1
News from 208............................3
News Notes...............................4
Noise Regulations Hearing................5
Workshop for Municipal Officials.........6
Annual Report to the Citizens............7
Schneidermeyer Criticizes EIS............12
CAM News.................................13
Permits..................................15
Trailside Botanizing.....................16

announced a major policy change to allow the use of federal dollars for the construction of lateral sewers.

A total of 125 proposed lateral sewer projects was submitted, and 70 of the applications were processed and forwarded to the United States Environmental Protection Agency (EPA).

By September 30, the EPA had approved projects in 70 communities and districts obligating the entire $153 million. In addition, the Congress in May appropriated another $1 billion for water treatment projects throughout the United States. The Connecticut share of this interim appropriation was $12,195,000.

Almost all these funds have been obligated, bringing the total committed to Connecticut projects to $163,883,000. The state has two years in which to obligate the remainder of the interim appropriation.

By meeting the September 30 deadline, Connecticut also became eligible to share in the reallocation of funds not obligated by other states. There is no estimate at the present time of the amount of additional funding that might be available from other states.

Below is a list of communities in which projects have been obligated by EPA. Figures are approximate and subject to modification in final grants. Grants cover facility plans, contract plans and specifications and construction of interceptor sewers, lateral sewers, treatment plants, pump stations and other water treatment facilities. In addition to new construction, projects may involve modifications or additions to existing facilities.

Grants to Municipalities for Water Treatment Construction Projects

Ansonia	$ 206,000
Avon	1,367,000
Berlin	3,800,000
Branford	757,000
Bridgeport	17,675,000
Bristol	746,000
Brooklyn	1,042,000
Burlington	24,000
Canaan	13,000
Canton	15,000
Cheshire	60,000
Colchester	4,970,000
Cromwell	1,642,000
Darien	2,494,000
East Hampton	6,427,000
East Haven	4,945,000
Ellington	267,000
Enfield	9,094,000
Fairfield	9,451,000
Farmington	196,000
Glastonbury	983,000
Greenwich	1,336,000
Groton	4,671,000
Jewett City	28,000
Kent	1,000
Litchfield	728,000
Manchester	1,305,000
Mattabasett Dist.	976,000
Meriden	$ 4,571,000
Metropolitan Dist. Comm.	366,000
Middletown	1,521,000
Montville	401,000
New Britain	2,930,000
New Canaan	7,000
Newtown	74,000
Norfolk	90,000
North Branford	4,697,000
North Haven	4,070,000
Norwalk	5,958,000
Norwich	1,034,000
Orange	210,000
Oxford	164,000
Plainfield	20,000
Portland	51,000
Putnam	22,000
Ridgefield	1,106,000
Seymour	70,000
Shelton	1,990,000
Simsbury	4,373,000
Somers	129,000
Southington	569,000
South Windsor	2,957,000
Sprague	41,000
Stafford	6,107,000
Stamford	87,000
Sterling	84,000
Stonington	3,325,000
Stratford	10,872,000
Suffield	1,752,000
Thomaston	365,000
Tolland	63,000
Torrington	2,283,000
Trumbull	9,843,000
Vernon	$ 1,553,000
Wallingford	118,000
Waterford	5,597,000
Watertown	2,011,000
Westport	3,030,000
Winchester	2,000
Wolcott	4,129,000
TOTAL	$163,883,000

208
WATER QUALITY
MANAGEMENT

209 COURT ST., MIDDLETOWN, CT. 06457 347-3700

By Joseph M. Rinaldi, 208 Public Participation Assistant

Water Quality Management

The Connecticut 208 Water Quality Management Program is a federally funded program designed to study the impact of "non-point" sources of pollution to our state's waters. Examples of non-point sources are: erosion and sediment from construction activities; runoff from agricultural lands; storm water runoff; seepage from solid waste disposal sites, and contamination of groundwater from septic systems.

The culmination of the 208 Program is the development and implementation of a management system to control non-point sources of pollution to a degree necessary to achieve swimmable/fishable (Class B) waters, wherever attainable, by 1983.

As is the strategy in all of the 208 tasks, the first phase of the management study will be an inventory of existing regulations and controls at the local, regional, state and federal levels to be conducted by each regional planning agency. Once the inventory is completed, the impact on water quality of these controls will be analyzed.

For each problem confronted, recommendations will be made to the appropriate governmental body to add to or enforce necessary controls to reduce or eliminate the non-point source in question. At all times the least cost alternatives will be recommended. However, where no problems are encountered, no new controls would be required.

As a final step, the Valley Regional Planning Agency will investigate various alternative management schemes which may be necessary to control, by region, water pollution-related problems. Examples of the range of management configurations to be reviewed are:

1. A super regional water resources authority which might oversee planning as diverse as approving the location of new industries and the sizing of their treatment facilities, to recommending location and size of home septic tanks;

2. An inter-local agreement among three or four neighboring communities to pool funds for the purpose of hiring a code enforcement officer;

3. A continuation of existing conditions.

The major outputs of the entire study will be as follows:

A. Report: Inventory of Local, Regional, State and Federal Statutes, Regulations and Directives.
November, 1977

B. Report: Assessment of Effectiveness of Existing Local, Regional, State and Federal Institutions and Regulations.
May, 1978

C. Report: Legal Review of Alternative Local and Regional Management Schemes.
August, 1978

D. Report: Recommended Changes to Local, Regional, State and Federal Institutions and Regulations.
November, 1978

Non-Structural Alternatives

A related study to be performed by the Connecticut River Estuary Regional Planning Agency involves the implementation of non-structural alternatives to water pollution control. In the eleven town coastal area of Connecticut called "Valley Shores" an engineering study is presently underway which will develop a program to control municipal waste water pollution without the traditional use of costly sewers and treatment facilities. Such a program will employ the use of various management techniques such as: household flow reduction apparatus, strict enforcement against development in areas not suitable for on-site, subsurface disposal, mandatory septic tank pumpouts.

The CRERPA will be investigating the feasibility of implementing such regulatory measures from a legal, social, environmental and economic aspect. Moreover, the CRERPA will assist in turning this novel concept of non-structural control of water pollution from an idea into reality and provide valuable documentation for other areas in the state facing the common problem of "to sewer or not to sewer".

The major outputs of this study will be:

A. Interim Report: Possible Non-structural Measures.
May, 1978

B. Report: Final Recommendations for Non-structural Measures.
November, 1978

News Notes

DEP Receives $100,000 Grant

On October 17th Commissioner Stanley J. Pac announced that the Department will receive a $100,000 federal grant to employ approximately 15 older citizens to assist DEP and the Department of Health.

The special employment program is being jointly sponsored by two federal agencies -- the Department of Health, Education and Welfare's Administration on Aging (AOA) has provided the funds and the U.S. Environmental Protection Agency (EPA) is administering the program. Personnel hired under the grant will be utilized in the Air Compliance, Water Compliance, Solid Waste Management and Information and Education Units of DEP, and in the safe drinking water program of the State Health Department.

Candidates for employment in this program must be 55 years of age or older, be in good health, and be available to work a minimum of 20 hours per week. Specific jobs may have additional special requirements.

Applications for employment are being processed through five area agencies: West Hartford Seniors Job Bank, Inc., 50 South Main St., West Hartford; Connecticut Labor Department Job Bank, 90 Washington St., Hartford; Retired Seniors Volunteer Project (RSVP), 115 Sigourney St., Hartford; Hartford Area Chapter, National Center on the Black Aged, c/o Community Council of the Capitol Region, Inc., 999 Asylum Ave., Hartford; and Hockanum Valley Community Council Job Bank, 1 Court St., Rockville.

Striped Bass Mortality

An investigation of striped bass mortality in western Long Island Sound has resulted in the identification of a bacterial agent as the probable cause of the death of these fish.

The investigation has been coordinated by the DEP Marine Region with cooperation from the Pathobiology Group of the National Marine Fisheries Service (NMFS), Northeast Fisheries Center at Milford.

Dr. Richard Robhon, a microbiologist stationed in Milford, has isolated a bacterial agent present in the kidney, liver and spleen of two dying striped bass. This agent will kill healthy striped bass in laboratory aquaria. The bacterium has not been identified and scientists are continuing their investigations.

Oliver T. Edstrom, DEP Marine Fisheries Biologist, who is coordinating the investigation, reports that PCB levels in the two dead fish are within current federal limits. "Toxic metal analysis, performed by the State Health Department Laboratory, also yielded values within acceptable limits," he said.

"It is unlikely that humans will contract this fish disease from the contaminated striped bass," Edstrom concluded.

DEP Appeals to Sportsmen

Paul Herig, State Deer Program Biologist, has predicted a good to excellent archery deer season and urged sportsmen to assist DEP in countering illegal wildlife activity.

"Although last winter was hard on the human populaton, it apparently had no negative effect on the whitetail deer population," Herig said.

The archery deer season opened one half-hour before sunrise on Saturday morning, October 22, and continues through November 23. The second portion of the archery season is open from December 22 through January 7, 1978.

"Archers have the first opportunity among Connecticut's deer hunters to demonstrate proper sportsmanship and hunter ethics," Herig said.

"It is the personal responsibility of all sportsmen to assist in the reduction of illegal wildlife activity. Those who fail to report wildlife law abuse are as guilty as the abuser because they have condoned the activity by their silence," he said.

"Cooperation from ethical sportsmen can make a difference in fighting the impact of the 'slob hunter' who discolors the image of respectable outdoorsmen. Five thousand extra pairs of archers' eyes and ears working in cooperation with DEP Conservation Officers can make things a lot tougher on the illegal hunter," Herig said.

"The non-hunting public must also recognize their share of the responsibility in this situation. Their failure to get involved may lead to an increase in illegal hunting activity," he added.

On October 23, a Bow Hunter Education Course was offered at the DEP Region III Headquarters on Rt. 66 in Marlborough. The all-day course included such phases of bow hunting as sportsmanship, ethics, care of equipment, and safety.

ANNUAL REPORT TO THE CITIZENS

Each year the department prepares an annual administrative report for the Governor which summarizes the responsibilities of the various units within the agency and briefly describes each unit's major achievements for the previous fiscal year. Because we have found this information extremely useful in the past, we are presenting a slightly edited version of the report for July 1, 1976 - June 30, 1977 in two installments in the Citizens' Bulletin.

In last month's issue we reported on the central staff units in the Office of the Commissioner and the line units in the Division of Conservation and Preservation. In this issue, you will find the reports for the last fiscal year of the Division of Environmental Quality. We hope you find this information useful.

PART 2:

Environmental Quality Division

Melvin J. Schneidermeyer, Deputy Commissioner

The Environmental Quality Division is responsible for the enforcement of laws and regulations relating to pollution control and resource protection. It includes units dealing with specific problems in the areas of air pollution, coastal area management, noise pollution, pesticides, radiation, solid waste management, water pollution and water resources.

Air Compliance

Most of the major DEP Air Compliance Unit Programs have been developed in response to the Clean Air Act Amendments of 1970 which required each State to prepare and implement a plan to attain and maintain federal ambient air quality standards. Major programs not required by the Clean Air Act include handling citizen complaints, open burning control, indirect source permit review and tax relief reviews.

To meet Clean Air Act requirements, the DEP prepared the Connecticut Air Quality Implementation Plan. This plan has enabled the Air Compliance Unit to lower industrial pollution (sulfur oxides and particulate) concentrations sufficiently to meet federal health standards throughout the State (through 1978). However, several industrial areas in the State still exceed federal standards for particulate matter, which are designed to protect against property and vegetation damage.

Connecticut also has a serious problem with motor vehicle produced pollutants. During the worst days, smog (photochemical oxidants) caused by motor vehicles exceeds federal health standards by as much as three times. A Transportation Control Plan (TCP) was prepared to address this problem and was submitted to the U.S. Environmental Protection Agency (EPA) for approval in August, 1976. The strategies set forth in the TCP constitute a revision of the Air Quality Implementation Plan and detail means for reducing automotive pollution to acceptable levels.

The Air Compliance Unit is divided into four sections: Air Monitoring; Engineering; Field Operations and Enforcement and Office of the Director.

AIR MONITORING. The Air Monitoring Section operates and maintains Connecticut's ambient air monitoring network of approximately 190 instruments, statistically analyzes monitoring data, prepares the annual Air Quality Summary and applies computer models to calculate impact on air quality of existing and proposed pollution sources. Twelve "trailers", with equipment whose data is telemetered on a real-time basis to a computer in Hartford, form the core of the monitoring network and provide the data for the Pollutant Standards Index (PSI). The PSI reports pollution levels for the past 24 hours, forecasts levels for the next 24 hours and is released each afternoon, seven days per week.

ENGINEERING. Connecticut has a permit and registration program conducted by the engineering section to fulfill federal requirements for controlling new and modified sources of air pollution. Over 11,000 emission sources and items of pollution control equipment are registered in the State. Approximately 175 permits for new sources have been issued during fiscal year 1977. This section is also responsible for preparing technical support for the TCP, implementing the Indirect Source Program, reviewing Environmental Impact Statements and examining Metropolitan Planning Organization transportation plans for consistency with air quality goals.

FIELD OPERATIONS AND ENFORCEMENT. This section conducts on-site inspections of facilities to determine compliance with air pollution regulations and logs and investigates complaints received. This section conducted 2,100 inspections, of which 680 were a result of citizen complaints; issued notices for 845 violations; and sent out 80 state compliance orders.

The most significant enforcement actions of fiscal year 1977 were the closing of 5 out of 15 municipal incinerators for violations of air pollution regulations. Several other incinerators are expected to come into compliance after July 1977.

In addition, the Enforcement staff is responsible for the stack test program and the development of an Operations and Maintenance Program which will ensure proper operation of installed control equipment.

OFFICE OF THE DIRECTOR. The Office of the Director includes administrative and service personnel. Staff members develop and oversee Unit management and policy making processes; budget preparation; and management and accounting.

Coastal Area Management

The Connecticut Coastal Area Management (CAM) Program began in August, 1974 in response to the Federal Coastal Zone Management Act of 1972. As specified in this Act, Connecticut has four years to design a comprehensive coastal management program which meets broad federal guidelines and meets with the approval of the local municipalities affected. Eighty percent of the CAM Program's funding comes from the federal government; the state provides the remaining 20% in matching funds. If Connecticut chooses to set up a management program, federal grants for implementing the plan will be made available on a continuing basis for an indefinite period of time.

The planning work for the Coastal Area Management Program is carried out by a staff of professionals who receive policy guidance from an Advisory Board composed of representatives of state agencies, coastal regional planning agencies and diverse interest groups.

The focus of FY '76 was directed toward developing a specific series of recommendations for an overall coastal management program. Among the 87 recommendations developed during the past year are:

* A definition of a two-tiered management boundary which outlines the inland limit of the Program's activities. The boundary recommended by CAM is the 100-year flood line as a nearshore boundary, with the landward boundaries of the coastal towns as the "second tier" of less intensive regulation.

* An identification of areas of particular concern, including wetlands, recreational areas, areas of historical, cultural or scenic significance, and potential sites for industrial or commercial development.

* A decision on the proper means for administering the program on a day-to-day basis. CAM recommends an integrated state-local management system, with the role of each clearly defined and coordination assured by statutes and regulations.

* A definition of "permissible" uses for those land and water activities having a direct impact on coastal waters. CAM recommends using a set of state-established performance criteria to evaluate each use as it is proposed. New standards for issuing permits would be created, but new permit programs would not be initiated.

Through the year, the CAM staff and other subcontractors have prepared 16 technical planning reports to assist in the preparation of these recommendations. In addition, four editions of Land's End, the CAM Program newsletter, have been published, and distributed at no charge, to thousands of interested citizens. An Atlas of Natural Resources of Long Island Sound, intended for public education purposes, has been written and will soon be published.

In conjunction with the League of Women Voters, 24 public meetings were held in the Fall of 1976 in various towns along the coast. The object of these meetings was to survey public opinion on the program's objectives. In the summer of 1977 CAM began a series of nine regional workshops in coastal and inland towns to discuss preliminary recommendations with the public.

Office of Noise Control

The basic goals implicit in Public Act 74-328 remain unchanged. The major activities of this Unit during 1976-77 were:

1. Completion, on October 15, 1976, of recommendations by the Noise Advisory Committee, for noise control regulations.

2. Holding of public hearings on the proposed regulations during December, 1976 and finally in June, 1977.

3. A Community Noise Workshop in February, 1977 attended by 100 state and local officials.

4. Limited noise abatement efforts in response to specific complaints.

5. Review of Environmental Impact Statements as they relate to noise levels.

6. Participation in the development of the Bradley International Airport Master Plan.

Pesticides Compliance

The Pesticide Compliance Unit administers the Connecticut Pesticide Control Act and related statutes. The Federal Insecticide, Fungicide and Rodenticide Act also places certain requirements on this Unit.

This Unit certifies and licenses all commercial pesticide applicators, and all dealers and applicators who use restricted-use pesticides; registers all pesticides; investigates pesticide accidents; samples pesticides and issues permits.

A continuing educational program increases the knowledge of present license holders and provides information to new applicants. Instructional sessions were held several times during the year and a self-instruction program is now being developed to upgrade the abilities of licensed applicators.

The Pesticides Unit receives requests for information on a wide range of subjects - related and unrelated to its activities. Requests for investigation of possible pesticide misuse and accidents are also increasing as a result of heightened public awareness.

Applicators licensed during Fiscal Year 1976-77:

Commercial	95
Private (farmers)	167
Operational	284
Dealers	8
1080 users	0

Permits given:

Aquatic	265
Aerial	18
1080	2
Restricted-use pesticides	75
Field Investigations	30
Inspections	204
Violations	115
Samples taken for analysis	287
Samples found deficient	11
Registrations	3900
Arrests and convictions	1
Tests administered	750

Radiation Compliance

The goal of the Radiation Compliance Unit is to reduce the radiation exposure of workers and the general public to the lowest parcticable level.

A statewide environmental radiological surveillance program is conducted to evaluate radiation levels to which the public might be exposed. The program is focusing more on the potential sources of contamination in response to public interests in nuclear facilities.

An emergency radiological assistance plan is maintained in cooperation with the State Police Department. In the event of accidents involving radioactive materials, assistance in evaluation is provided to the owner.

Periodic inspections are made of the approximately 2,500 installations which register use of diagnostic and therapeutic x-ray equipment. These inspections evaluate exposures of the patient, the operator and the individuals in adjoining offices for compliance with state regulations.

During the month of January, an annual registration of all other sources of ionizing radiation including radioactive materials and other sources of x-ray equipment is conducted. Approximately 310 installations are registered under this program. Periodic inspections of the facilities are performed to determine compliance with state regulations.

Other miscellaneous sources of ionizing radiation were inspected on request or as part of special projects.

Solid Waste Management

The major objective of the Solid Waste Management Unit is to assure that solid wastes are processed and disposed of in a manner which will minimize environmental problems, prevent health hazards and nuisances, and maximize resource recovery. The unit's activities are being conducted in the following areas: 1) Enforcement, 2) Technical Assistance, 3) Hazardous Wastes and 4) Technical Development and Training.

The Enforcement Section conducted 1,059 inspections of public and private solid waste disposal areas. These were done as part of a routine inspection program, as a result of complaints received or as a follow-up of the 11 orders and 18 notices of violations that were issued. As a result of staff activities, 5 court actions were initiated and 5 hearings were held. Approximately 360 water samples were collected and analyzed in conjunction with these activities and with the engineering studies carried out by consultants to correct problems at existing disposal areas and evaluate water quality at new sites.

Among its many activities, the Technical Assistance Section has 1) Issued 113 site surveys of proposed solid waste disposal areas and transfer stations; 2) Issued 24 permits for new and existing disposal areas; 3) Issued permits for 3 transfer stations and 5 variances for temporary transfer stations (there are now 15 transfer stations operating in Connecticut); 4) Inspected municipal incinerators, shredders and transfer stations as well as the progress of the Bridgeport resources recovery facility; 5) Conducted a source separation conference attended by approximately 225 persons; 6) Attended over 600 meetings with state and federal officials and consultants, the public, service clubs, local committees and officials, and colleges (over 30 formal presentations were addressed to these groups); 7) Received 20 municipal solid waste management plans, making a total of 62 submitted (of this total, 20 have been approved); 8) Completed six of the original nine regional plans funded by the Department; 9) Developed a proposal for a source separation program for the state office building; 10) Discontinued disposal operations at Milford's disposal site in Silver Sands State Park; and 11) Committed grants of $352,035 for assisting municipalities to purchase equipment and construction facilities.

In the past years, the Hazardous/Industrial Waste Management Program has been primarily involved in gathering information. However, during the past fiscal year, the program has adopted a more active problem-solving role. Seven specific waste surveys were conducted to provide quantitative data for waste management facility design. Connecticut industries, institutions and citizens were directed toward environmentally sound solutions to 45 hazardous/industrial waste disposition problems of varying magnitude for which more than 35 waste samples were collected and analyzed. Eleven industrial waste site surveys were conducted, and engineering plans and designs were reviewed for three of these sites. In anticipation of the future, staff have, through the National Governors' Conference and the U.S. Environmental Protection Agency, dedicated much time and effort to the development of standards, regulations and guidelines pursuant to the hazardous waste management subtitle of the new Federal Resource Conservation and Recovery Act (Public Law 94-580).

Technical Development and Training activities resulted in original certification or recertification of 300 disposal operators. Instruction was provided primarily by video tape and produced in cooperation with the Middlesex Community College specifically for this Department. The unit also proceeded with the development of an economical method of land disposal of sewage sludge and completed the conversion of operations at 30 disposal sites to the more efficient cell method.

Water Compliance

The Water Compliance Unit continued efforts to control industrial and municipal water pollution, nearing the goals set by the Clean Water Act of 1967. The Unit also continued the supervision of municipal and private treatment facilities, operator training and operator certification.

During the fiscal year which ended June 30, 1977, a total of 172 new orders and permits were issued (162 Abatement Orders and 10 National Pollution Discharge Elimination System (NPDES) Permits). This brought the cumulative total of orders and permits issued (through 6/30/77) to 2,278.

As required by specific steps of orders, permit applications, and municipal sewer construction, the staff reviewed the engineering reports, construction plans and specifications submitted for the various municipal, industrial, and private projects. A total of 78 engineering reports and 147 construction plans and specifications were approved by the engineering staff. Also, 159 orders were brought into final compliance, 52 new discharge permits (primarily to groundwater and sewers) were issued, and 149 permit applications were processed.

During the fiscal year 1976-77 the field staff of the General Water Pollution Control Section conducted 458 reconnaissance inspections and 755 sampling inspections of major and minor permittees (NPDES treated discharge).

In order to insure the proper operation of existing state, municipal, and private treatment facilities, the Department carried out 450 reconnaissance inspections and 102 sampling inspections of major municipal permittees, and 54 interim construction inspections of wastewater treatment facilities.

After assurance of safe handling of oil and chemical products, the Department in FY '77 issued 75 terminal licenses, 82 waste oil and chemical collection permits, and 8 spill cleanup contractors permits. Under the requirements of Sections 14-52, 14-319, and 21-16, the Department issued 169 motor vehicle verifications for adequate waste oil handling on gasoline dealer's licenses, motor vehicle dealer and repair licenses, and automobile junkyard licenses. The staff continued to supervise the cleanup of oil and hazardous materials spills. A total of 554 oil and hazardous materials spills were reported and investigated (an increase of 8.4% from the previous fiscal year). These occurrences resulted in the spillage of 305,063 gallons of oil and/or chemical products, (an increase of 115,188 gallons from the previous fiscal year).

On October 18, 1972, major amendments to the Federal Water Pollution Control Act became effective. These amendments set forth many new construction grant requirements and led to the promulgation of new regulations on February 11, 1974. The statutes pertaining to state grants were revised in 1975 to better coordinate the State/Federal programs. A major change allows this Department to make Step 1 (Engineering Report), Step 2 (Plans and Specifications) and Step 3 (Construction) grants parallel to the new federal procedure. The amount of the Federal Grant was increased to 75% of the eligible project cost. Upon the release of four billion dollars of impounded funds, Connecticut received $155,091,800, which is available through September 30, 1977.

Connecticut received $12,195,000 of the one billion dollar Congressional appropriation of May 3, 1977. Congress is presently considering appropriating an additional $3.5 billion of FY '77 and $4.5 billion for FY '78.

To date the Department has entered into agreement for payment of the following amounts:

State Construction grants (includes cost of engineering report & plans and specifications)	$112,432,632
Prefinancing of Federal Grants	92,089,314
Advancement for Plans & Specifications	19,693,245
Storm and Sanitary Drainage Separation	912,012
Advancements for Engineering Reports	225,000
Retroactive Grants	19,664,472
Engineering Report - Step 1	891,140
Plans and Specifications - Step 2	294,290
Construction - Step 3	-
TOTAL	$246,202,105

The current total represents an increase of $8,822,806 over the previous fiscal year.

The Water Quality Management Planning Section continued its efforts in support of the field operating sections. The Planning staff is responsible for providing planning coordination with local, regional, and federal agencies, and providing statistical input and evaluation, and model development and analyses related to water quality management. During FY '77, seven river basin plans were completed in compliance with Section 303e of the Federal Law (92-500). These plans included detailed analyses of all designated water quality segments within the basins.

The FY '76 Areawide Waste Treatment Management Application prepared jointly by the Planning staff and Connecticut's regional 208 agencies was approved and funds are being used for implementation in accordance with the State's 208 work plan. The 208 Wastewater Management Agency will be responsible for assessing non-point source pollution on a statewide basis. The planning section will assist the statewide agency in the initial phases of the program while continuing to assist in collecting data on PCB pollution within the state.

Water Resources

The Water Resources Unit is responsible for the regulation of activities involving the water and water related resources of Connecticut and for providing coordination and technical assistance for federal, state and municipal water resource management programs.

The Unit is divided into two sections -- the Wetlands Management Section and the Flood Management Section.

WETLANDS MANAGEMENT. The Wetlands Management Section is basically a regulatory unit including the Inland Wetlands Program, the Tidal Wetlands Program, a Structures and Dredging Program covering the use of lands submerged beneath the tidal and navigable waters of the State.

Although the State is responsible for the regulation of all of its inland wetlands, the statutes delegate the regulatory authority to each of its municipalities if the local program meets the requirements of the State regulatons. One hundred forty-seven towns have established a local wetlands agency while 22 towns remain under direct State control. During the fiscal year, the Water Resources Unit received 65 applications for inland wetlands permits from municipalities under the State's jurisdiction. Six public hearings were held and 38 permits were conditionally granted. Action by the 1977 General Assembly will require a public hearing for all wetland applications after October 1, 1977.

All tidal wetlands are regulated directly by the State. The Tidal Wetlands Regulatory Program received 27 permit applications for regulated activities within the established bounds of tidal wetlands. Twenty public hearings were held and 21 permits issued within the fiscal year ending June 30, 1977. As part of a continuing surveillance program, 58 field inspections of alleged violations were made by Unit personnel. These inspections resulted in the citation by the Commissioner of 15 violators. One Cease and Desist Order was issued by the Commissioner, and 6 violations were referred to the Office of the Attorney General.

The Structures and Dredging Program regulating the use of land submerged beneath tidal and navigable waters received 90 permit applications. Six public hearings were held and 92 permits were issued during the fiscal year. Field inspections were also held and four violators cited.

FLOOD MANAGEMENT. The major responsibility of the Flood Management Section is to protect life and property from coastal and inland flooding. To carry out this function, the section provides coordinating and technical assistance for all federal, state and municipal flood and erosion control projects and conducts a regulatory program for dam safety and stream channel encroachment. The Flood Management Section is also the lead agency in coordinating the Federal HUD Flood Insurance Program and several other regulatory functions relating to low stream flow, sale of water and diversion of water for domestic supply.

The U.S. Army Corps of Engineers, the U.S.D.A. Soil Conservation Service, and Special Act State funded projects have all contributed to the implementation of the flood control program during the past year. Major projects under construction or completed in the past year include the Park River Conduit (Hartford), the North Creek Conduit (Bristol) and the Farm Brook Watershed Project (Hamden). Work continued in the design and/or planning of many other flood control projects such as the Rooster River (Bridgeport), the Avery Brook Watershed (South Windsor), the Steel Brook (Seymour), the Island Brook (Bridgeport) and the Norwalk River Watershed.

The Farm River Flood Control Project in East Haven is proceeding under the direction of a firm retained to design Special Act funded measures which will be compatible with the long-range Federal Program. The 1977 General Assembly also authorized funds for the completion of the Trout Brook and Norwalk River Flood Control Programs. In addition, preliminary negotiations have been held on drafting an agreement for the Shaw's Cove Hurricane Protection Project in New London.

During the fiscal year, 30 applications were received for dam construction permits. Seventeen of the structures were not subject to the Unit's supervision. Construction permits were issued for the other 13 applications. A total of 374 dam inspections were made during the year. Of the 2,905 dams now inventoried, 1,065 are classified as having a significant damage potential upon failure and therefore fall under the jurisdiction of the Water Resources Unit.

The Stream Channel Encroachment Line Program authorized placement of 25 encroachments riverward of the channel lines. One application was withdrawn, ten violations of channel lines acted on and three long standing encroachment line violations were resolved.

Six Connecticut communities were added to the Federal Flood Insurance Program. Thirty flood insurance rate studies were initiated and one community joined the emergency program. The signing of Executive Order No. 18 by Governor Grasso met the federal requirements for State participation in this program. The Executive Order regulates the development of flood plain areas by Connecticut State Agencies.

Schneidermeyer Criticizes Highway EIS

Deputy Commissioner Melvin J. Schneidermeyer has registered strong objections to the failure of the Department of Transportation (DOT) to consider mass transportation alternatives in the development of a final Environmental Impact Statement (EIS) for the Interstate 84 and 86 interchange in Manchester and East Hartford.

In a memorandum to DOT Deputy Commissioner Harold F. Heintz dated October 7, Schneidermeyer said the final plans "appear to be a recreation of a 1950 highway catering solely to the automobile." He added, "It appears your Department cannot see beyond the automobile era and fails to fulfill your responsibilities in preparing an EIS."

Schneidermeyer said he was particularly disappointed by the "withdrawal of priority lanes for high occupancy vehicles, a commitment made in your draft EIS."

A lengthy critique of the EIS was forwarded with Schneidermeyer's memo. In its discussion of air quality issues, the critique states: "The primary deficiency of the EIS is that it does not completely examine all the possible alternatives. The cases considered in the EIS were 'Build', 'No Build' and 'Do Nothing'. An EIS is required to consider all reasonable alternatives, i.e., mass transit including light rail, express bus, bike paths, etc."

coastal
area
management
71 capitol avenue hartford, conn. 06115

CAM NEWS

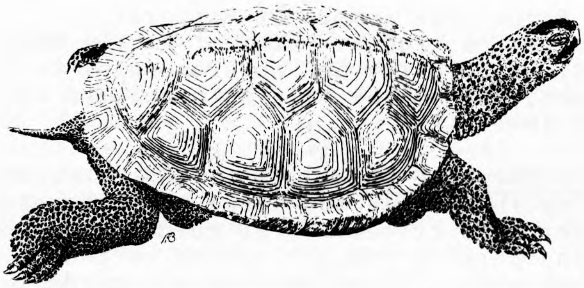
Coastal Resource Atlas Available

How was Long Island Sound created? What are the types of crabs one sees along the Connecticut coast, where do they live and what do they eat? What's so special about estuaries? Where are some especially good places for birdwatching along the coast, and what is one likely to see there?

If you are interested in the answers to questions such as these, you will probably be interested in the Long Island Sound Natural Resource Atlas, which is now available from the Coastal Area Management office free of charge. The 52 page Resource Atlas was recently published by the Coastal Area Management Program to provide some basic information about the resources and processes of Long Island Sound and the Connecticut shorelands. Shoreline features, such as wetlands and beaches, and the forces that create and influence them, such as waves and tidal currents, are discussed. One chapter is devoted to shoreline vegetation, ranging from seaweeds and cordgrass to the trees in forests near the coast. Another chapter covers crustacea: different species' habitats, appearances, behavioral patterns and commercial or recreational significance. Fish, plankton, mollusks, mammals, reptiles, amphibians...they are all discussed in varying detail. There is even one chapter on rare and endangered species in the coastal area.

The text of the Resource Atlas is accompanied by numerous illustrations. For example, the distribution of shoreline features and the areas of greatest concentration of various species of fish are mapped, and coastal habitat zones and plant communities are illustrated. Line drawings show what some of the plants and animals look like.

The Resource Atlas is written in a clear, non-technical style and can be understood by anyone of high school age or over, even without a background in the natural sciences. It may be especially useful for students, educational organizations and libraries, but all citizens who wish to better understand and enjoy Connecticut's coastal resources are encouraged to use it. To obtain a copy, just contact the Coastal Area Management Program at 71 Capitol Avenue, Hartford, Connecticut 06115. Telephone: 566-7404.



CAM Interns Conduct Research

A number of specialized research projects which supplement the work of the full-time CAM staff have been carried out by student interns. This summer the Massachusetts Audubon Society Environmental Intern Program provided CAM with fourteen interns who worked on the following projects:

1. Biological Inventory. A study group of nine graduate students conducted a natural systems inventory of Long Island Sound and its related terrestrial resources. A joint project of the CAM Program and the Natural Resources Center of DEP, it was conducted at UConn's Avery Point branch utilizing UConn's facilities and special services.

The project staff was divided into two teams, each headed by an experienced biologist. The marine team investigated, inventoried and mapped the marine resources within Long Island Sound, including currents, salinity, bottom type, habitat, and species diversity. The terrestrial team did the same thing for related land resources, including drainage basins, marshes and wetlands, bluffs and rocky headlands.

The approach was to take existing data and to combine it with new data, where necessary, to describe Connecticut's coast and Long Island Sound as an integrated natural resource system, with complex interrelationships between various land forms, water systems, and habitats. It is an attempt to begin viewing Long Island Sound as a single interrelated natural system, and to identify gaps in our knowledge or the existing data base toward which future research can be directed.

Participating in the biological inventory, due to be completed in early 1978, were: David Danzig, Fred Dobbs, Michael Farrar, Steve Gautie, Barry Gold, Ronald McMahon, Ronald Rosza, Richard Schack and Robert Spivey. All are graduate students in biology and related environmental sciences.

2. Recreational Survey. As part of its federal requirements, CAM needs to inventory the various types of recreational activities offered by Connecticut's coast, what restrictions are placed upon them, and what, if any, opportunity exists for their expansion or improvement. Existing data were found to be incomplete, and in some cases, inaccurate, and additional research was needed.

This project will detail the actual shore frontage (in miles) of sandy beach, rocky headlands and bluffs; stony or ledge beachfront; tidal marsh; and heavily urbanized waterfront. Existing recreational facilities are being quantified, by category, in number of miles, and limitations on their use are being noted. Surrounding land use and water quality are being correlated. Also being investigated is the availability of publicly-owned boat launching areas.

Begun this summer by Margaret Schneider, a graduate student at the Yale School of Forestry and Environmental Studies, the survey will be completed in early 1978.

3. Performance Guidelines. CAM is recommending that state and local agencies use "performance criteria", or guidelines, when issuing permits for activities in the coastal area. These performance guidelines would be used in evaluating the environmental impact of the proposed activity.

This summer two interns, Dana Rowan and Diane Lillie, researched the background information necessary for establishing the criteria. They investigated the biological, chemical, and physical parameters of various coastal resources, determined what impacts land use activities have on those parameters, and recommended measures to mitigate those impacts. Data from this project will be used by CAM staff to recommend performance guidelines for state environmental regulatory programs and local regulatory programs implemented through local Planning and Zoning Commissions.

Diane Lillie is a Master's candidate at Duke's School of Forestry and Environmental Studies, specializing in environmental management. Dana Rowan is a graduate of Dartmouth College, with a bachelor's degree in Environmental Studies. They both have work experience in marine biology sciences.

4. Fisheries Management. This project examined possible legal impediments to interstate fisheries management agreements. Specific topics of investigation were: existing statutes covering reciprocal agreements with other states; existing interstate fisheries management agreements; the existing in-state administrative structure for fisheries management; existing fisheries resource management criteria, and current or proposed limited entry mechanisms. The study was conducted with the assistance of the DEP Marine Region Office.

Fisheries Processing. Also studied were state and local statutes which prohibit or impede the development of fish processing plants in coastal towns. State and local restrictions were investigated, and the impact of their revision or removal was studied.

Both of these studies were conducted by Tim Mulhern, a second-year law student at Boston College.

5. Fiscal Impact Model. The purpose of a "fiscal impact model" is to provide municipal decision-makers with a method of assessing, in a general way, the local or regional impact of new facilities. This study presents a framework for collecting, estimating and interpreting major local fiscal impacts which occur as a result of economic development, and can be used to evaluate local activities which impact critical coastal resources. It was conducted by David Stockton, a Ph.D. candidate in economics at Yale University.

6. Coordinated Permitting System. The feasibility of instituting a coordinated one-stop permitting system for development activity was investigated. Special consideration was given to development activity that is either of concern to more than one town, or that impacts environmentally-sensitive areas. A brief summary of state programs that exercise permit authority is included as well as a brief overview of permit controls at the state and local level.

The study was completed by Dave Boutin, a graduate student at the School of Community Planning and Development at the University of Rhode Island. He also has a Master's in Economics from Northeastern University.

For further information concerning any of these projects, contact Arthur Rocque at 566-7404.

Editor's Note: the CAM Program publishes Land's End, a quarterly newsletter about coastal issues and CAM activities. If you wish to receive Land's End, which is available free of charge, contact the CAM Program at 71 Capitol Avenue, Hartford, Connecticut 06115 - telephone 566-7404.

November 21st

Hearing on Revised Noise Regulations

On November 21st, DEP will hold a public hearing on the revised draft noise regulations in the Council Chambers at the Municipal Building, DeKoven Drive and Court Street, Middletown.

The revised draft (dated September, 1977) was prepared following consideration of comments made at public hearings in December, 1976 and July, 1977 on the original draft (October, 1976). The original draft was prepared by the Noise Control Citizens' Advisory Committee appointed by Commissioner Joseph N. Gill in July of 1975.

The legislative policy of the state as stated in Section 22a-67 of the Connecticut General Statutes (C.G.S.), recognizes that excessive noise is a hazard which: causes health and economic injury, is capable of control, and should be controlled by the state and its municipalities.

In Section 22a-69 the legislature directed the Commissioner to establish a state-wide program of noise regulation. The statute requires the Commissioner to establish reasonable noise standards for major stationary sources, as measured beyond the property time of the major sources, and to regulate and restrict the use and operation of any stationary noise source.

The regulations must be based on considerations of public health, safety and welfare. They must also take into account the nature of the stationary source being regulated and the degree of noise reduction achievable. The method for determining what reduction is achievable is by the "application of the best available and practical technology, taking into consideration technology which may be available at the time the regulation becomes effective...."

Section 22a-69 also requires that the Commissioner adopt a variance procedure in cases where the regulations would "impose an arbitrary or unreasonable hardship."

Citizens' Committee

In developing the original draft of the regulations, the Citizens' Committee adopted several goals.

The Committee, after studying the legislation, decided the regulations should:

- provide a minimum standard for controlling environmental noise which could serve as a model of minimum noise protection for towns seeking to develop their own regulations.
- be equitable, reasonable and practical, taking into consideration the ability of noise sources to achieve compliance and the ability of DEP to enforce the regulations.
- provide objective numerical standards for allowable noise.
- cover construction site noise. (See "Major Changes" below.)
- not cover noise problems better handled at the local level--barking dogs, noisy parties, public address systems, etc.
- be enforced by a complaint-instigation procedure not a registration or permit program;
- exempt certain activities such as care-of-grounds equipment from 7 a.m. to 9 p.m., one-day patriotic celebrations, and testing of alarm signal devices.

The Regulations

The approach adopted by the Committee and retained in the revised draft is to set allowable levels of noise measured in dBA (decibels on the A weighting network) for three different land use zones, and to consider the zone of the emitter and that of the receptor. The three zones are residential, designated as the "Class A Noise Zone;" commercial, designated as the "Class B Noise Zone;" and industrial, designated as the "Class C Noise Zone."

The regulations provide a matrix which gives the allowable dBA levels for noise emitted from each type of zone to each type of zone. For example, where a noise emitter is in an industrial, or Class C Noise Zone, and the receptor is also in a Class C Noise Zone, the maximum noise level is 70 dBA.

However, where the emitter is in a Class C Noise Zone and the receptor is in a residential, or Class A Noise Zone, the maximum daytime level is 61 dBA and the maximum nighttime level is 51. The Class A Noise Zone is the only one with separate levels for day and night. The dual residential standard was proposed because people sleep in residential areas at night and are more susceptible to noise intrusion at that time.

The regulations do not include noise from motor vehicles, because vehicle noise is covered by a different section of the

Connecticut General Statutes which is administered by the Department of Motor Vehicles (Section 14-80a-1 through 14-80a-18). Nor do the regulations include commercial aircraft noise which is pre-empted from state and local control by the Federal Aviation Administration.

Major Changes

After considering the comments at the previous public hearings and after conducting an independent noise survey to determine the reasonableness of the regulations, the hearing officer, Deputy Commissioner Melvin Schneidermeyer, proposed the following major changes to be considered at the November 21 hearing:

1) Existing sources will be allowed an additional 5 dBA above the standards, and they will be allowed a 24 month "phase-in" period after the effective date of the regulations to make operational changes and investments in control measures in order to achieve compliance with this higher dBA level.

2) Aircraft engine testing will be exempt from the regulatons, because of the technical problems and substantial costs associated with attempting to control this form of noise.

3) Construction site noise will be exempt because it does not meet the definition of a "stationary source," and because it originates primarily from mobile sources. The enabling statute does not specifically authorize DEP to control stationary sources of noise. Municipalities are given specific authority to regulate construction activities (Section 22a-73(b)(5)), and the U.S. Environmental Protection Agency is in the process of developing noise emission level standards for new construction equipment.

A great number of technical changes were also made. For a copy of the latest revised draft regulations, call Deputy Commissioner Melvin Schneidermeyer at DEP in Hartford 566-4856.

For background on the development of the noise regulatons see the November 1976 issue of the Bulletin, Vol. 4, No. 3, p. 6. For background on the problem of noise and its solutions, see the December, 1974 issue of the Bulletin, Vol. 2, No. 3, p. 1.

If you are unable to attend the hearing, you will have until **November 30, 1977** to submit written testimony to Deputy Commissioner Melvin Schneidermeyer, DEP, Rm. 161, State Office Building, Hartford, Ct. 06115.

November 30

Workshop for Municipal Officials

DEP and the University of Connecticut Cooperative Extension Service will present a special workshop aimed at local officials involved in land use decision making on November 30th at 7:30 p.m. at the Hartford County Extension Center, 1280 Asylum Ave. in Hartford.

The session will offer background information on the natural resource data base -- how to use it and how it can be applied toward more informed land use decisions. The workshop will stress reading and working with topographic maps to develop a basis for understanding site plans and eventually for developing single resource factor overlay maps. Participants will also gain introductory information on using soil surveys.

DEP and the Extension Service are currently offering a more in-depth course for local officials which goes beyond the introductory level mentioned above. The basic course on November 30th is meant especially for new members of municipal boards who feel they need more basic information for their duties. The session also serves as a back-up for the more in-depth workshops which will eventually be offered statewide.

For further informaton, contact Ellen Frye, Natural Resources Center, DEP, 566-3540.

DEP Citizens' Bulletin

Published eleven times a year by the Department of Environmental Protection. Yearly subscription $2.00. 2nd class postage paid at Hartford, Connecticut. Funds are also provided through a federal grant from the Office of Coastal Zone Management under the Coastal Zone Management Act of 1972. Please forward any address change immediately.

Bulletin material may be reprinted without permission provided credit is given, unless otherwise noted. Address all communications to the Editor, DEP Citizens' Bulletin, Department of Environmental Protection, Room 112, State Office Building, Hartford, Connecticut 06115.

Permits Denied

Water Resources

Inland Wetlands

October 21
Donald R. Ahern
Inland Wetland Application #471 denied without prejudice. Town of Wallingford.

Permits Issued

Air Compliance

July 1
Lisbon Textile Prints, Inc.
Permit to operate a boiler in the Town of Lisbon.

July 1
Jennison-Wright Corporation
Permit to construct a boiler in South Windsor.

July 1
Jennison-Wright Corporation
Permit to operate a boiler in South Windsor.

August 4
Greenwich Board of Education
Permit to operate a boiler in Greenwich.

August 8
Kerite Company
Permit to operate an incinerator in Seymour.

August 16
Olin Corporation
Permit to construct a boiler in New Haven.

August 24
United Technologies Corporation
Permit to construct a turbine drive engine in Middletown.

August 24
United Technologies
Permit to construct an inlet air heater in Middletown.

August 24
United Technologies
Permit to construct a combustion rig in Middletown.

August 24
United Technologies
Permit to construct an inlet air heater in Middletown.

August 29
Soneco Service Inc.
Permit to construct an asphalt batch plant in Montville.

September 1
City of Norwalk
Permit to operate a sewage sludge incinerator in Norwalk.

Water Compliance

October 5
Technichrome Color Lab
Permit to discharge film processing waste waters to the Connecticut River Watershed in the City of Hartford.

October 5
Philips Medical Systems, Inc.
Permit to discharge 9,900 gallons per day of sanitary sewage and 1,500 gallons bi-weekly of a paint spray booth rinse water to the Housatonic River Watershed in the Town of Shelton.

October 6
Kapetan Associates
Permit to discharge domestic wastewaters from 101 unit housing project for the elderly to the Long Island Sound Watershed in the City of Bridgeport.

October 19
Seymour Sand & Stone, Inc.
Permit to operate and maintain a sanitary landfill with the resultant lechate discharge to the groundwaters of the Yantic River Watershed in the Town of Bozrah.

Water Resources

Inland Wetlands

August 12
Ahern Development Corporation No. 77-IW-145
Permit to alter or fill inland wetlands on 12 lots of a 47 lot subdivision known as St. Andrews in Wallingford.

August 15
Board of Airport Commissioners
No. 77-IW-144
Permit to construct a box culvert within inland wetlands and watercourses in the Town of New Haven.

September 19
Socrates Mihalakos No. 77-IW-148
Permit to cross an unnamed water course with a sanitary sewer and install culverts in Wallingford.

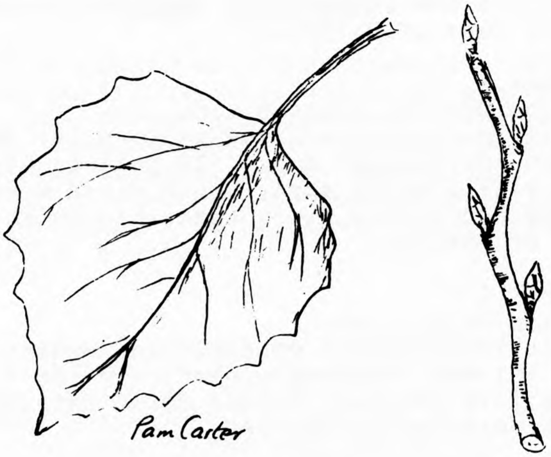
October 13
No. 77-IW-151
Michael Jankura
Permit to pipe approximately 365 feet of an intermittant watercourse in Stratford.

October 21
Chris Bargas, Inc. No. 77-IW-153
Permit to construct and perform related grading, filling and drainage within inland wetlands in Stratford. Included in the permit is permission to enlarge an existing pond on the site.

(Cont. on Supplement Page)

Trailside Botanizing

by G. Winston Carter



Big-Tooth Aspen

(Populus grandidentata)

The month of November may seem to many an anti-climax to the autumn foliage and a waiting period before the snow comes and winter sets in, but the rather open woods and fallen leaves give one an opportunity to continue to make close observations.

Here and there amongst the fallen leaves in certain wooded areas one may discover twigs with leaf clusters of the big-tooth aspen. This aspen can be quickly spotted because of its bark which is mostly smooth and yellow-green. The leaves are a point of interest because of the presence of flattened leaf stalks which enable them to flutter in the wind when they are on the tree, even in a slight breeze. This is a characteristic shared with other members of the poplar family. The quaking aspen is a well-known example. Big-tooth aspen and quaking aspen are both very similar in appearance. The big teeth on the leaf edge and the dusty-gray winter buds which emerge at an angle from the twig distinguish the big-tooth aspen from the quaking aspen. Both are found in burned or lumbered over areas and are quick growing but short-lived because they are sun-loving and give way to more valuable species that are shade tolerant, thus crowding out the aspen.

The big-tooth aspen serves a valuable role as a soil anchor while a forest is healing from the scars of burning or of being cut over. The seeds, buds and twigs are important foods of numerous birds and mammals, such as ruffed grouse, white-tail deer and cottontail rabbit.

DEP citizens' bulletin

State of Connecticut
Department of Environmental Protection
State Office Building
Hartford, Connecticut 06115

Commissioner: Stanley J. Pac
Director, Info & Ed: Greg Sharp
Layout: Rosemary Gutbrod
Typist: Marilyn Brown
Phone: 566-5524

"The Connecticut Department of Environmental Protection is an equal opportunity agency that provides services, facilities and employment opportunities without regard to race, color, religion, age, sex, physical handicap, national origin, ancestry, marital status or political beliefs."

SECOND CLASS POSTAGE PAID
AT HARTFORD, CONNECTICUT.